# C. Shane Reese

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# EDUCATION

Aug. 1999	Doctor of Philosophy: Statistics. Texas A&M University.
Aug. 1995	Master of Science: Statistics. Brigham Young University.
Aug. 1994	Bachelor of Science: Statistics. Brigham Young University.

# EXPERIENCE

2019-present	Academic Vice President. Brigham Young University.				
2017 - 2019	Dean. College of Physical and Mathematical Sciences (CPMS), Brigham Young University.				
2012 - 2017	Melvin W Carter Professor. Department of Statistics, Brigham Young University.				
2013	Adjunct Professor. Department of Math & Stat, University of New Mexico				
2010-2012	Associate Chair & Grad. Coord Department of Statistics, Brigham Young University.				
2009-present	<b>Professor</b> . Department of Statistics, Brigham Young University.				
2005-2009	Associate Professor. Department of Statistics, Brigham Young University.				
2008	Adjunct Professor. Department of Mathematics, Arizona State University.				
2008	Visiting Professor. Department of Statistics, Simon Fraser University.				
2001-2006	Statistical Scientist. Berry Consultants, LLC.				
2001-2004	Assistant Professor. Department of Statistics, Brigham Young University.				
2000-2001	Adjunct Professor. Department of Statistics, Iowa State University.				
1999-present	Technical Staff Member. Statistical Sciences, Los Alamos National Laboratory.				

# PROFESSIONAL ACTIVITIES

# Awards

2019	Environmetrics Best Paper Award
2016	CPMS Distinguished Citizenship Award
2013	Elected Fellow, American Statistical Association
2012	Melvin W. Carter Professorship
2010	Karl G. Maeser Excellence in Teaching Award (University)
2010	College of Phys. & Math. Sci. Faculty Excellence in Teaching Award (3-10yr.)
2010	American Statistical Association Excellence in Statistics in Sports Award
2008	Howard Christensen Award (GE Teaching, BYU Stat)
2007	Howard Christensen Award (GE Teaching, BYU Stat)
2007	Department Chair's Outstanding Paper Award
2007	H.O. Hartley Award (Distinguished Alumnus, TAMU)
2005	Department Chair's Outstanding Paper Award
2004 - 2007	Brigham Young University Young Scholar Award
2004	Department Chair's Outstanding Paper Award
2002	Strategic Management Society Best Conference Paper Award
2002	BYU Department of Statistics Honored Faculty Member
2001	Journal of the American Statistical Association Applications and Case Studies
	Invited Paper Award
1999	Connor Award (Outstanding statistics graduate student), Texas A&M University
1999	University Distinguished Graduate Student, Texas A&M University
1999	Journal of the American Statistical Association Applications and Case Studies
	Invited Paper Award
1998	ASA Council of Chapters Service Recognition Award
1998	Academic Excellence Award, Texas A&M University
1998	R. L. Anderson Student Paper Award, SRCOS/ASA Research Conference

## Affiliations

American Statistical Association, ISBA, Biometric Society (WNAR), IMS

## Service to the Profession

2015-2018Member, National Academy of Sciences Committee on Guardrail end-treatments2016NSF Career Panelist2014JQAS Editor Search Committee Chair2014DOE Conference on Data Analysis Organizing Committee2014NSF Review Panelist2013ASA Nominations Committee2014ASS Nominations Committee2014Associate Editor, JASA Reviews2013ASA Statistics in Sports Chair2012Joint Statistical Meetings Program Chair (ISBA Rep)2012Technometrics Special Invited Associate Editor2011Member, National Academy of Sciences Committee on ACWA Monitoring2011NSF Review Panelist, Arlington, VA2010External Reviewer for DOD BMDS Reliability, Huntsville, AL2010External Reviewer for DOE/OS Grant (ASCR)2010External	
2007Member, National Academy of Sciences Committee on Biological Standoff Detection Systems2006-presentMember, ASA Committee on Science and Public Affairs2006-2007President, Utah Chapter of ASA2006-presentAssociate Editor, Journal of the American Statistical Association2006-2008Vice-chair, ASA Committee on Federally Funded Research2005Organizer, Spring Research Conference on Stat. in Industry, Park City, UT2004-2007Associate Editor, Technometrics2004Student Paper Competition Chairman, WNAR, Biometric Society2001-2006Regional Advisory Board, WNAR, Biometric Society2001ASA Joint Statistical Meetings Invited Poster Chair2000-2002Continuing Education Chair - Section on Physical and Engineering Sciences, ASA2000-2001President - Albuquerque Chapter of American Statistical Association1997-presentReferee - JASA, JBES, Technometrics, JABES, SAPL and Biometrics1997-1999Treasurer - Southeast Texas Chapter of American Statistical Association1994-1995President - Mu Sigma Rho (Honor Society), BYU	

#### Service to Sponsoring Institution

2019-present	Jerusalem Center Executive Committee, BYU
2012-2016	University Awards Committee, BYU
2012-present	Promotion and Tenure Committee Chair, BYU
2010-2016	University Task Force on Student Ratings, BYU
2010-2014	University Athletic Advisory Committee (Chair 2012), BYU
2009-2010	Promotion and Tenure Committee Chair, BYU
2007-2010	Elected to Faculty Advisory Committee, BYU
2007-2009	Teaching and Learning Committee Chair, BYU
2007-present	Search Committee Member, BYU
2007	College of Physical and Mathematical Sciences Deans Search Committee, BYU
2006-2008	University Awards Committee, BYU (chair - 2008)
2005 - 2007	Search Committee Chair, BYU
2005 - 2007	Computer Committee Chair, BYU
2002 - 2005	Five Year Planning Committee, BYU
2002 - 2005	Project and Thesis Committee Member, BYU
2002	Awards Committee Member, BYU
2000	Statistical Sciences Group Recruiting Committee Member, LANL
2000	Division Junior Staff Research Group Coordinator, LANL

#### PUBLICATIONS AND TECHNICAL REPORTS

#### Refereed

- Horton, Z., Page, G., **Reese**, C.S., Lepley, L., and White, M. (2020). "Template Priors In Bayesian Curve Registration," *Technometrics*, tentatively accepted.
- White, P., Reese, C.S., Rupper, S., and Christensen, WF (2019). "Bayesian Gaussian process model for Antarctic surface mass balance and field measurement proposals," *Environmetrics* (Best Paper Award Winner).
- Nguyen, AH, Rosenbrock, CW, Reese, CS, and Hart, GLW (2017). "The Robustness of Cluster Expansion: Assessing the Roles of Relaxation and Numerical Error," to appear *Phys. Rev. B.*
- Hamada M, Steiner SH, MacKay RJ, Reese CS (2016), "Planning and Analyzing Experiments with Models that Distinguish Between Replicates and Repeats," *Quality and Reliability Engineering International*, (to appear).
- Gajewski, BJ, Reese, CS, Colombo, J, Carlson, SE. (2016) "Commensurate Priors on a Finite Mixture Model for Incorporating Repository Data in Clinical Trials." *Statistics in Biopharmaceutical Research*, 8, 151–160..
- Hopkins JT, Kim H, Son SJ, Reese CS, Seeley MK. (2016) "Lower extremity EMG alterations in subjects with AI clustered by motion." Medicine & Science in Sports & Exercise. 48, 724.
- Hopkins JT, Kim H, Son SJ, Reese CS, Roundy R, Seeley MK. (2015) "Movement pattern clustering of patients with self-reported ankle instability during a jump task." *British Journal of Sports Medicine*. 49, A5.
- Reese, C.S., Spencer, B.S., Ball, E.L. (2015). "A Model for the Classification of SNe: An Application of Hierarchical Gaussian Processes" *Statistical Analysis and Data Mining*, 8, 302-313.
- H. O. Funsten, R. DeMajistre, P. C. Frisch, J. Heerikhuisen, D. M. Higdon, P. Janzen, B. A. Larsen, G. Livadiotis, D. J. McComas, E. Möbius, C. S. Reese, D. B. Reisenfeld, N. A. Schwadron, and E. J. Zirnstein (2015) "Symmetry of the IBEX Ribbon of Enhanced Energetic Neutral Atom (ENA) Flux,"

The Astrophysical Journal, 799, 68.

- Seeley, M.K., Denning, W.M., Becker Pardo, M., Winward, J.G., Parcell, A.C., Reese, C.S., and Hopkins, J.T. (2014). "Ambulation ground reaction force correlates with articular cartilage metabolism." Presented at the 7th World Congress on Biomechanics. Boston, MA, USA.
- Schultz, G, Dowell, A, Roundy, R, Saito, M, and Reese, CS (2014) "Evaluating Safety Effects of Signal Improvements," *Transportation Research Record*, 19–26, 2435.
- Javitt, JC, Reese, CS, and Derrick, MK (2013) "Deployment of an mHealth Patient Monitoring Solution for Diabetes—Improved Glucose Monitoring Leads to Reduction in Medical Expenditure," *Diabetes Management*, 16, 334.
- H. O. Funsten, R. DeMajistre, P. C. Frisch, J. Heerikhuisen, D. M. Higdon, P. Janzen, B. A. Larsen, G. Livadiotis, D. J. McComas, E. Möbius, C. S. Reese, D. B. Reisenfeld, N. A. Schwadron, and E. J. Zirnstein (2013) "CIRCULARITY OF THE INTERSTELLAR BOUNDARY EXPLORER RIBBON OF ENHANCED ENERGETIC NEUTRAL ATOM (ENA) FLUX" The Astrophysical Journal, 776, No. 1.
- Nelson, LJ, Ozolins, V, Reese, CS, Zhou, F, and Hart, GLW (2013)"Cluster expansion made easy with Bayesian compressive sensing," *Phys. Rev. B* 88 (15), 155105.
- Kleiber, W., Sain, S.R., Heaton, M.J., Wiltberger, M., Reese, C.S. and Bingham, D. (2013). "Parameter Tuning for a Multi-Fidelity Dynamical Model of the Magnetosphere." Annals of Applied Statistics, 7 (3), 1286-1310.
- Kolb, C., Beauchamp, JL, Beaudet, RA, Berkowitz, JB, Chen, H, Cooper, AT, Fernandez, FM, Gibbons, RD, McLean, JA, Morris, MD, Murphy, DW, Reese, CS, Rhomberg, L, and Viggiano, A (2012).
  "Assessment of Agent Monitoring Strategies for the Blue Grass and Pueblo Chemical Agent Destruction Pilot Plants", National Academy of Sciences.
- Hopkins, T.J., Coglianese, M., Glasgow, P., Reese, C.S., and Seeley, M. (2012). "Alterations in evertor/invertor muscle activation and center of pressure trajectory in participants with functional ankle instability". Journal of Electromyography and Kinesiology, to appear.
- Ryan, K.J., Hamada, M.S., and Reese, C.S. (2011), "A Bayesian hierarchical PLP model with application to supercomputer reliability," JQT, 43, 3, 209-223. 9.
- Schultz, G.G, Thurgood, D.J., Olsen, A.N., and Reese, C.S. (2011). "Analyzing Raised Median Safety Impacts Using Bayesian Methods". *Transportation Research Record*, 96–103.
- Reese, C.S., Wilson, A, Guo, J, Hamada, M, Johnson, V (2011), "A Hierarchical Model for Estimating Reliability from Weapon System Surveillance Data", Journal of Quality Technology, 43, No. 2, 127–141.
- Vander Weil, S., Wilson, A.G., Graves, T.L., and Reese, C.S. (2011). "A Random Onset Model for Degradation of High-Reliability Systems". *Technometrics*, 53 No. 2, 163–172.
- Ranjan, P., Bingham, D., Reese, C.S. and Lu, W. (2011) "Follow-up Experiment Designs for Computer Models and Physical Processes" Journal of Statistical Theory and Practice, 5, 119–136.
- Heaton, M., Reese, C.S., and Christensen, W.F. (2010). "Incorporating Time-Dependent Source Profiles Using the Dirichlet Distribution in Multivariate Receptor Models" *Technometrics*, **52**, No. 1: 107–123.
- Higdon, D., Reese, C.S., Moulton, J.D., Vrugt, J.C. and Fox, C. (2009). "Posterior exploration for computationally intensive forward models", in *MCMC Handbook*.

- Reese, C.S., Deininger, P., Hamada, M.S. and Krabill, R. (2008). "Exploring the Statistical Advantages of Nondestructive Evaluation Over Destructive Testing". *Journal of Quality Technology*, 40, 259–267.
- Lingwall, J., Christensen, and Reese, C.S. (2008). "Dirichlet based Bayesian multivariate receptor modeling," *Environmetrics*, 19, 618–629.
- Coyle, P., **Reese**, C.S., et al. (2008). *Test and Evaluation of Biological Standoff Detection Systems*, National Academy of Science Report, Washington, D.C.
- Reese, C.S. (2007). "Interactions". in Encyclopedia of Quality and Reliability, Wiley, New York.
- Paige, G., Fellingham, G.W, and Reese, C.S. (2007). "Using Box-Scores to Determine a Position's Contribution to Winning Basketball Games," *Journal of Quantitative Analysis in Sports*, 3, No. 4, Article 1.
- Anderson-Cook, C.M., Graves, T., Hamada, M., Hengartner, N., Johnson, V.E., Reese, C.S., and Wilson, A.G. (2007). "Bayesian Stockpile Reliability Methodology for Complex Systems". *Military Operations Research*, 12, No.2, 25–37.
- Christensen, W.F, Shauer, J., Dillner, A. and Reese, C.S. (2007). "Clustering composition vectors using uncertainty information". *Environmetrics*, 18, 859–869.
- Wilson, A.G., Graves, T.L., Hamada, M.S. and Reese, C.S. (2006). "Advances in Data Combination, Analysis and Collection for System Reliability Assessment". *Statistical Science*, 21, No.4,514–531.
- Curtis, S.M., Fellingham, M.S., and Reese, C.S. (2006). "The Fair Triathlon: Equating Standard Deviations Using Bayesian Nonlinear Models" Journal of Quantitative Analysis in Sports, 2, No. 1, Article 3.
- Reese, C.S., Hamada, M.S., and Robinson, D. (2005). "Assessing System Reliability by Combining Multilevel Data from Different Test Modalities" Quality Technology & Quantitative Management, 2, No. 2,177–188.
- Hansen, M.H., Perry, L.T., and Reese, C.S.(2005). "A Bayesian Application of the Resource-based View: Narrowing the Gap between Theory and Practice," in *Restructuring Strategy*, eds Cool, KO, Henderson, JE, and Abate, R, *Blackwell Publishing*, 207–235.
- Hamada, M., Martz, H.F., Reese, C.S., Graves, T.L., Johnson, V.E., and Wilson, A.G. (2004). "A Fully Bayesian Approach for Combining Multilevel Failure Information in Fault Tree Quantification and Corresponding Optimal Resource Allocation". *Reliability Engineering and System Safety*, 86, 297–305.
- Hansen, M.H., Perry, L.T., and Reese, C.S. (2004). "A Bayesian Operalization of the Resource-Based View". Strategic Management Journal, 25, 1279–1295.
- Reese, C.S., Wilson, A.G., Hamada, M.S., Martz, H.F., and Ryan, K.J. (2004). "Integrated Analysis of Computer and Physical Experiments", *Technometrics*, 46, 153–164.
- Graves, T.L., Reese, C.S., and Fitzgerald, M. (2003). "Hierarchical Models for Permutations: Analysis of Auto Racing Results," *Journal of the American Statistical Association*, 98, 282–291 (Department Chair's Outstanding Paper Award).
- Johnson, V.E., Graves, T.L, Hamada, M., and **Reese**, C.S. (2003). "A Hierarchical Model for Estimating the Reliability of Complex Systems" (with Discussion), *Bayesian Statistics* 7, Oxford University Press.
- Reese, C.S., Calvin, J.A., George, J.C. and Tarpley, R.A. (2001). "Estimation of Gestation in Bowhead

Whales" (with Discussion). Journal of the American Statistical Association, 96, 915–938. (JASA Applications and Case Studies Invited Paper Award Winner)

- Hamada, M., Martz, H.F., Reese, C.S., and Wilson, A.G. (2001). "Finding Near Optimal Bayesian Designs Via Genetic Algorithms". The American Statistician, 55, 175–181.
- Hermann, K. and Reese, C.S. (2001). "Relationship Between Selected Measures of Impairment, Functional Limitation and Disability in Patients with Cervical Spine Disorders," (with Discussion) Physical Therapy, 81, 903–914. (feature paper)
- Berry, S.M., Reese, C.S. and Larkey, P.M. (1999). "Bridging Different Eras in Sports" (with Discussion). Journal of American Statistical Association, 94, 661–684. (JASA Applications and Case Studies Invited Paper Award Winner)
- Eubank, R.E., Kambour, E.L, Kim, J.T., Klipple, K., Reese, C.S. and Schimek, M.E. (1998). "Estimation in Partially Linear Models". Journal of Computational Statistics and Data Analysis, 29, 27–34.

**Submitted** Christensen, M, Heaton, M, Rupper, S, Reese, CS, and Christensen, WF (2019). "Bayesian Multi-scale Dynamic Modeling of Precipitation in the Indus Watershed," submitted to *Frontiers in Earth Science*.

#### Non Refereed

- Berry, S.M., Reese, C.S. and Larkey, P.M. (2005). "Bridging Different Eras in Sports". in Anthology of Statistics in Sports, ASA/SIAM.
- Wilson, A.G., Reese, C.S., Hamada, M., and Martz, H.F. (2003). "Integrated Analysis of Reliability Data", in *Mathematical Reliability: An Expository Perspective*, R. Soyer (ed).
- Hansen, M.H., Perry, L.T., Reese, C.S. and Fellingham, G.W. (2002). "A Bayesian Application of the Resource Based View: Bridging the Gap Between Theory and Practice", *Strategic Management Society Conference Proceedings.* McKinsey and Company. (SMS Best Conference Paper Award Winner)
- Sellers, K.F., Booker, J.M., Singpurwalla, N.D. and **Reese, C.S.** (2002). "Bayesian Methods," in *Fuzzy* Logic and Probability Applications: Bridging the Gap. ASA/SIAM: New York.
- Morzinski, J., Martz, H.F., **Reese**, C.S., and Denogean, L. (2002). "Hierarchical Bayes Regression with Correlated Measurement Errors", *Proceedings of the Section on Bayesian Statistics*.
- Reese, C.S. (1997). "Computing Cook's Distance for Nonlinear Regression in S-Plus". Interface Proceedings, 29, 59–61.

#### In Preparation

- Nguyen, AH, Rosenbrock, CW, Reese, CS, and Hart, GLW (2019). "The Robustness of Cluster Expansion: Assessing the Roles of Relaxation and Numerical Error", submitted to *Phys. Rev - B*.
- Dubnicka, S. and **Reese**, C.S. (2019). "A Bayesian model for environmental exposure data with limit of detection". being prepared for *The American Statistician*.
- Dubnicka, S. and **Reese**, C.S. (2019). "Bayesian analysis of challenge model data". being prepared for *Journal of Biological and Environmental Statistics*.
- Graves, T., Myers, K., Lawrence, E. and **Reese, C.S.** (2019). "RUSH: Ratings Using Scores Histories" being prepared for *Journal of the American Statistical Association*.

### BOOK WRITTEN

Hamada, M.S., Wilson, A.G., Reese, C.S. and Martz, H.F. (2008). *Bayesian Reliability*, Springer-Verlag, New York.

# PATENT

Webb, J., Humpherys, J., and Reese, C.S. (2013). ROBUST WATERMARKING FOR DIGITAL MEDIA United States 13/049,543, Granted.

#### **Grants & Contracts**

2020	Co-PI: "Uncertainty Quantification in High Mountain Asia Climate Reconstruction," NASA.Funded \$285,0		
2016	PI: "Uncertainty Quantification for High Mountain Asia Climate", NASA, Funded \$165,550		
2016	PI: "Uncertainty Quantification for Antarctica Surface Mass Balance Estimation", NASA, Funded \$245,000		
2014	PI: "Effects of Experimental Anterior Knee Pain During Physical Activity on Knee Articular Cartilage Morph		
2014	PI: "Brazilian Markets Volatility Modeling", Virginia Tech Bioinformatics Institute, Funded \$35,000		
2013	Co-PI: "Consortium for Nonproliferation Enabling Capabilities:		
	a Research and Education Collaboratory", (not funded)		
2013	Co-PI: "Collaborative Research: Scalable Statistical Validation and Uncertainty		
	Quantification for Large Spatio-Temporal Datasets", NSF, Funded \$198,524		
2013	PI: "Estimation of Rate Constants in Mass Spectrometry." Funded \$27,000		
2013 PI: "FRG: Statistical Uncertainty Quantification in Magentosphere Modeling",			
	National Science Foundation. (not funded)		
2012	Co-PI: "Functional Data Analysis in Ankle Stability Research",		
	National Institutes of Health (NIA). (not funded)		
2009	PI: "Uncertainty Quantification in Upper Atmospheric LFM Model",		
	National Science Foundation. (Funded \$665,000.)		
2006-2010	Co-PI: NSF, DMS, Computational Science Training Grant No. 0639328, (Funded \$704,848.)		
2008	Co PI: "CDI: Uncertainty Quantification in Upper Atmospheric Modelling",		
	National Science Foundation. (not funded)		
2007	Co PI: "Collaboration between Mathematics and the Geosciences",		
	National Science Foundation. (not funded)		
2007	Co PI: "Incorporating Multiple Sources of Information",		
	Environmental Protection Agency . (not funded).		
2004	Co PI: "Source Apportionment Modeling",		
	Environmental Protection Agency, STAR Grant. (Funded \$238,000).		
2003	Co PI: "Hierarchical Modeling of Aging",		
	National Institutes of Health. (not funded).		
2003	Co PI: "Nanoscale Positioning Uncertainty Quantification",		
	National Science Foundation. (not funded).		
2002	PI: "Integrated Approach to Hierarchical Modeling of Reliability",		
	Los Alamos National Laboratory. (awarded \$18,662).		
2001	Co PI: "Functional Imputation of Route Indices",		
	Submitted to Bureau of Transportation Statistics (not funded).		

# STUDENTS SUPERVISED

	Year	Student	Supervisory Role	Current Position			
	2000	Kenneth Ryan (ISU, PhD)	Committee Member	WVU	-		
	2002 Mike Smith (BYU, MS)		Committee Chair	DNF (Modelers,SLC)			
	2003	Mike Joner (BYU, MS)	Committee Chair	P&G Corprorate (PhD)			
	2003	Nicole Smith (BYU, MS)	Committee Chair	IHC (MS)			
	2003	Geraldine Madariaga (BYU, BS)	Advisor	BYU (homemaker)			
	2004	Sherstin Mortensen (BYU, MS)	Advisor	not yet completed			
	2005	Elizabeth Lawson (BYU, MS)	Committee Chair	Financial analyst (MS)			
	2006	Andrew Stacey (BYU, MS)	Committee Chair	Ohio State (Med School)			
	2006	Matt Heaton (BYU, MS)	Committee Chair	Duke U (PhD)			
	2006	Jessica Olsen (BYU, BS)	Advisor	Adobe			
	2006	T.J. Gray (BYU, BS)	Advisor	Actuarial Firm			
	2006	Richie Wiess (BYU, BS)	Advisor	Duke (PhD, Epidemiology)			
	2007	Scott Gregory (BYU, BS)	Advisor	Actuarial Firm			
	2007	Ryan McBride (BYU, BS)	Advisor	UNC Biostat (PhD)			
	2007	Chien Wang (BYU, BS)	Advisor	Job			
	2008	Tommy Leininger (BYU, MS)	Advisor	Duke U (PhD)			
	2008	Taylor Redd (BYU, BS)	Advisor	Adobe (MS)			
	2008	Timothy Perkins (BYU, BS)	Advisor	Job	T '4 ID		
	2009	Erika Hernandez (BYU, MS)	Advisor	Duke U (PhD)	Invited Pre-		
	2009	Christopher Guzman (BYU, BS)	Advisor	BYU (MS)			
	2010	Jared Webb (BYU, BS)	Advisor	BYU (Phd)			
	2010	Brad Ferguson (BYU, MS)	Advisor	NCSU (PhD)			
	2011	Andrew Olsen (BYU, MS)	Advisor	Ohio St (PhD)			
	2012	Brittany Spencer (BYU, MS)	Advisor	Ford Motors			
	2013	Devin Francom (BYU, MS)	Advisor	UCSC (PhD)			
	2014	Nick Martineau (BYU, MS)	Advisor	VC Firm (SLC)			
	2015	Ryan Roundy (BYU, BS)	Advisor	Oracle			
	2015	Mickey Warner (BYU, MS)	Advisor	UCSC (PhD)			
	2015	Phil White (BYU, MS)	Advisor	Duke U (PhD)			
	2015	Jared Ward (BYU, MS)	Advisor	Olympian!			
	2016	Kevin Williams (BYU, MS)	Advisor	Zions NB			
	2017	Katie Larsen (BYU, MS)	Advisor	Arizona			
	2018	Brenton Mabey (BYU, MS)	Advisor	UofU			
	2018	Matt Goodwin (BYU, MS)	Advisor	Oracle			
	2019	Michael Christensen (BYU, MS)	Advisor	Duke (PhD)			
	2019	Lindsay Williamson (BYU, BS)	Advisor	not yet completed			
	2019	Lindsay Warr (BYU, MS)	Advisor	not yet completed			
s	sentations						

- 2020 4 invited presentations
- 2019 2 invited presentations
- 2018 5 invited presentations
- 2017 6 invited presentations
- $2016 \quad 6 \ {\rm invited} \ {\rm presentations}$
- 2015 8 invited presentations
- 2014 "Hierarchical Reliability of Complex Systems", City U, Hong Kong
- 2014 "Comparing Apples and Oranges: Combining Multiple Test Modalities", CNSD, Washington, DC
- 2014 "Bayesian Compressive Sensing for Materials Experiments", Simon Fraser
- 2014 "Ratings Using Scores Histories (RUSH)", BYU (Stat)
- 2014 "Ratings Using Scores Histories (RUSH)", BYU (Business)
- 2013 "Information Integration Technology", P& G, Cincinnati, OH
- 2013 "Hierarchical Reliability of Complex Systems", QPRC, NY
- 2013 "Fast Cluster Expansion via Bayesian Compressive Sensing", SRC, CA
- 2013 "Hybrid Experimental Design for Industrial Experiments", IMS-China, Chengdu, China
- 2013 "Information Integration Technology", P& G, Cincinnati, OH
- 2011 "MCMC for Multiple Fidelity Computational Models", INFORMS, Arizona
- 2011 "Identifying Steroid Use in ML Baseball Players", ASA/JSM, Miami
- 2011 "Random Onset of Degradation Modeling", SRC, Chicago
- 2011 "Identification of Streakiness in Tennis", Bowling Green, OH
- 2010 "MCMC for Computationally Intensive Forward Models", ASFM, Hong Kong, China.
- 2010 "Random Onset of Degradation Modeling", UMBC, Baltimore, MD
- 2010 "Estimation of Pollution Source Directions", US EPA, Washington, DC
- 2010 "Bridging Different Eras Revisited", JSM, Vancouver, BC
- 2010 "MCMC for Computationally Intensive Forward Models", Interface, Seattle, WA
- 2010 "MCMC for Computationally Intensive Forward Models", SRC, Gaithersburg, MD
- 2010 "Bridging Different Eras Revisited", Booth School of Business, Chicago, IL
- 2009 "Adaptive Design of Chem/Bio Detectors", Washington, DC
- 2009 "MCMC for Computationally Intensive Forward Models", Vancouver, BC
- 2009 "Integrated Design of Experiments for Climate", Seattle, WA
- 2009 "Adaptive Design of Chem/Bio Detectors", Ames, IA
- 2008 "Advanced Statistical Models in Sports", Pontevedra, SPAIN
- 2008 "Hierarchical Models for Possession Level Data", Washington, DC, INFORMS
- 2008 "Integration of Computer Experiments in Source Apportionment", IMS/SRC, Atlanta, GA
- 2008 "Integration of Computer Experiments in Source Apportionment", ENVR/TIES, Kolowna, BC, Canada
- 2008 "Integration of Computer Experiments in Source Apportionment", ASA/JSM, Denver, CO
- 2008 "Statistics in Sports", Roundtable Leader, ASA/JSM, Denver, CO
- 2008 "Assessing Goodness-of-Fit in Bayesian Reliability", Raytheon Missile Systems, Tucson, AZ
- 2008 "Assessing Goodness-of-Fit in Bayesian Reliability", Raytheon Missile Systems, Tucson, AZ
- 2008 "Bayesian Source Apportionment", Kansas State U., Manhattan, KS
- 2007 "Bridge Building: Bayesian Hierarchical Models In Sports", Utah State, Logan, UT
- 2007 "Bayesian Source Apportionment Directional Analysis", TAMU, College Station, TX
- 2007 "Bayesian Source Apportionment Directional Analysis", Int. Conf. on Design, Greensboro, NC
- 2007 "Bayesian Hierarchical Reliability", Raytheon, Arizona
- 2007 "Information Integration Technology", National Academy of Science
- 2007 "Statistics in Sports Consulting", ASA JSM, Salt Lake City
- 2007 Invited Discussion: "Subjective Likelihood Analysis", ASA JSM, Salt Lake City

#### Invited Presentations (cont.)

"Degrees of Separation: Statistics and Defense", KEYNOTE ADDRESS, Army Conf. AS 2006 2006 "Hybrid Experimental Design: Computer or Physical", JSM, Seattle. 2006"Hybrid Experimental Design: Computer or Physical", DAE, Tianjin, CHINA. 2006 "Hybrid Experimental Design: Computer or Physical", SSC, London, CANADA. "Hierarchical Modeling for Complex Systems", Interface, Pasadena. 20062006 "Hierarchical Modeling for Complex Systems", Kansas ASA. 2006 "Hierarchical Modeling for Permutations", KSU 2005"Hybrid Experimental Design: Computer or Physical", INFORMS, San Francisco. 2005"System Reliability Assessment: A Bayesian Hierarchical Approach", JSM, Minneapolis. 2004"Comparison of GASP and Response Surface to Integrated Analysis", SAMSI Workshop, Banff. 2004"Hierarchical Reliability Based on System Lifetime Data", MMR Conference, Santa Fe, NM. 2004 "Hierarchical Reliability Based on System Lifetime Data", SRC, Gaithersburg, MD. 2004 "Hierarchical Models for Permutations: Auto Racing Results", Simon Fraser, Vancouver, BC 2003 "Integrated Analysis of Computer and Physical Experiments", JANNAF, Colo. Springs, CO. "Hierarchical Models for Sports Applications", IMS Mini Meeting, WPI, MA. 2003 2003 "Surviving Graduate School", BYU Graduate Student Fall Workshop, Provo, UT. 2003 "Integrated Analysis of Computer and Physical Experiments", General Motors, Detroit, MI. 2003 "Optimal Resource Allocation for Fault Trees", Math. Meth. for Combinatorics, Portland, ME. 2003 "Bayesian Methods for Applied Fields", Organized Invited Session at WNAR, Denver, CO. 2003 "Integrated Analysis of Computer and Physical Experiments", ISI, Berlin, Germany. 2002 Invited Panelist for "Knowledge Modeling", Spring Research Conference, Ann Arbor, MI. "Supercomputer Reliability", The RAND Corporation, Santa Monica, CA. 2002 "Optimal Bayesian Experimental Design", DAE Conference, Vancouver, BC, Canada 2002 2001"Bayesian Optimal Experimental Design", W.L. Gore, Flagstaff, AZ. 2001"Bridging Different Eras in Sports", Northern Arizona Univ., Flagstaff, AZ. 2001"Estimation of Gestation in Bowhead Whales", St. Cloud State, St. Cloud, MN. 2001"Bridging Different Eras in Sports", SMU, Dallas, TX. 2001 "Integrated Analysis of Computer and Physical Experiments", U. of Iowa, Iowa City, IA. 2001"Information Integration", AWE Exchange, Aldermaston, UK. 2001"Evaluation of Computer Models", Joint Aerospace Warfare Symposium, Seattle, WA. "Hierarchical Modeling of Complex Systems", UQWG, Los Alamos, NM. 2001 "Bayesian Optimal Experimental Design", Q&P Meetings, Austin, TX. 2001 2001 "Estimation of Gestation in Bowhead Whales", JSM, Atlanta, GA 2000 "Supercomputer Reliability", Brigham Young University, Provo, UT. 2000 "Information Integration", Proctor and Gamble, Cincinatti, OH. 2000 "Information Integration", Joint Aerospace Warfare Symposium, San Antonio, TX. "Bridging Different Eras in Sports", Joint Statistical Meetings, Anaheim, CA. 1999"Estimation of Gestation in Bowhead Whales", Los Alamos NL, Los Alamos, NM. 1999 "Estimation of Gestation in Bowhead Whales", Quintiles Consulting, Kansas City, MO. 19991999 "Estimation of Gestation in Bowhead Whales", Mayo Clinic, Rochester, MN. 1999"Estimation of Gestation in Bowhead Whales", University of Connecticut, Storrs, CT.

1998 "Bridging Different Eras in Sports", Brigham Young University, Provo, UT.